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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,848	02/20/2004	Jef De Brabander	AP35699 090495.0282	7487

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EXAMINER

OWENS, AMELIA A

ART UNIT	PAPER NUMBER
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1625

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,848

Applicant(s)

DE BRABANDER ET AL.

Examiner

Amelia A. Owens

Art Unit

1625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/3/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-27 is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,13-17 and 23 is/are rejected.
- 7) ☒ Claim(s) 3 and 6-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 18-22 have been canceled. Claims 1-17,23-27 remain pending.

Claim Rejections - 35 USC § 102

2. Claims 1,2,4,5,13-17,23 remain rejected under 35 U.S.C. 102(b) as being anticipated by West and Northcote for the reasons of record.

Applicants' comments are noted but are not persuasive. Applicants are arguing stereochemistry, i.e. the references teach inactive enantiomers while the claimed compounds are active enantiomers, and the reference does not inherently suggest the claimed stereochemistry. Stereochemistry, a subdiscipline of chemistry, involves the study of the relative spatial arrangement of atoms within molecules. There is a distinction between a new article of commerce and a new article that is patentable. Any change in form, such as stereochemistry, may render an article new in commerce. But to be patentable it must be more efficacious or possess new properties by a combination with other ingredients and not merely a change of form that has the advantages which one skilled in the art would expect from the change. Such is the case here.

A description of optical activity can be found in most organic chemistry textbooks. Certain organic compounds consist of a mixture of optically active isomers. A chiral carbon atom can be found in a compound if it contains a carbon atom bonded to four different groups. One skilled in the art would expect a compound having a chiral center carbon atom to consist of a racemic mixture, i.e. a 50:50 mixture of levorotatory (-) and dextrorotary (+) optical isomers. Further, one of ordinary skill in the art would know how to resolve a racemic mixture of organic compounds into its optical isomer components *or* how to produce an optical isomer of a known compound.

Accordingly, at the time applicants filed their patent application, one skilled in the art would have recognized from the structural formula of *peloriside A* that it consists of a racemic mixture of (+) and (-) optical isomers. One skilled in the art, based on the utility of West and Northcote, would expect the compound to have antiproliferative activity.

During patent examination, the pending claims must be given their broadest

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reasonable interpretation consistent with the specification. Herein, the specification is not so limited to 'active enantiomers', nor are the claims so limited.

With regard to claim 2, the term 'synthetic' is preamble and given no patentable weight. However derived, the compound is the compound. Peloruside A is known in the art.

However, the compound is isolated from marine sponge is irrelevant since no method of producing the compound is claimed. The product isolated is still peloruside A.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1,2,4,5,13-17,23 are rejected under 35 U.S.C. 103(a) as being unpatentable over West and Northcote. See also above.

Claims 1 and 2 claim synthetic Peloruside A. This does not patentably distinguish from the compound isolated from a natural source.

For claim 4,5,13,23 the variables are such that peloruside A is encompassed. The alkoxy and acyloxy derivatives are commonly known to have similar pharmaceutical properties to the compounds containing the free hydroxy groups.

For claims 14-17, peloruside A has anticancer activity. See West @ page 447 column 2 last paragraph, for example.

One of ordinary skill in the art would thus be motivated to prepare compounds according to West and Northcote in order to obtain the beneficial peloruside A compound. Again, there is a distinction between a new article of commerce and a new article that is patentable. Any change

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in form may render an article new in commerce. But to be patentable it must be more efficacious or possess new properties by a combination with other ingredients and not merely a change of form which as the advantages that one skilled in the art would expect from the change. Such is the case here.

Claim Objections

4. Claims 3,6-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

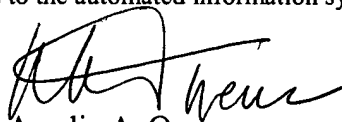
Allowable Subject Matter

5. Claims 24-27 are allowed. The prior art neither teaches nor suggests the claimed synthetic process for preparing peloruside A derivatives. In the absence of any evidence or apparent reason why the claimed compounds do not possess the disclosed utility, the allegation of utility in the specification must be accepted as correct. In re Kamal et al, 158 USPQ 320; Ex parte Krenzer, 199 USPQ 227.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia A. Owens whose telephone number is 571-272-0690. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Amelia A. Owens
Primary Examiner
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